



DOCKET NO: 241538US3X

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
FUMIO KINOSHITA, ET AL. : EXAMINER: BATSON, V.
SERIAL NO: 10/645,543 :
FILED: AUGUST 22, 2003 : GROUP ART UNIT: 3671
FOR: CONTINUOUS UNDERGROUND :
TRENCH EXCAVATING METHOD AND
EXCAVATOR THEREFOR

SUPPLEMENTAL RESPONSE

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

In response to the Office Action dated February 22, 2005 and the notice of non-responsiveness dated Jul 11, 2005, Applicants respond as follows:

The Examiner had objected to the specification because equations 2 and 3 allegedly reduce to $F_z=0$. Applicants replied in the response of April 22, 2005 that equation 2 is directed to the penetration resistance during penetration operation whereas the value of the frictional resistance F_{fz} in equation 3 is calculated by operating the lift cylinders in an unloaded (unlanded) floating state (page 9, lines 7-10).

According to the notice of non-responsiveness, if equation 3 represents resistance when the trencher is floating in the air, why does the cutter post volume or the liquid specific gravity γ around the cutter post affect frictional resistance. In reply, Applicants note that while equation 3 refers to the excavator being in an "unlanded, floating state in the air," this does not require that it be out of the environment of the trench.

Adjustment Date: 11/02/2005 SDIRET01 10645543
08/25/2005 DJONES1 00000001 150030
01 FC:1251 120.00 CR

PATENT & TRADEMARK
DIVISION

2005 SEP 16 PM 4:22

US PATENT & TRADEMARK
OFFICE

September 13, 2005

UNITED STATES PATENT AND TRADEMARK OFFICE
2051 Jamieson Avenue
Suite 300
Alexandria, VA

Attn: Frank Lebron
Refund Department

Re: Deposit Account #150030

Dear Mr. Lebron:

Enclosed is a copy of a portion of our deposit account statement of August, 2005. Please review the highlighted charge on **Serial Number 10/645,543** in the amount of \$120.00 on fee code #1251.

This charge appears to be in error. **An Office communication mailed on July 11, 2005, set the period for response to "ONE (1) MONTH or THIRTY (30) DAYS from the mailing date of this notice, whichever is longer..." The response filed on August 11, 2005, was timely filed and no extension fee was necessary. Therefore, the charge on our deposit account for an extension of time is incorrect.**

Please investigate this charge and **kindly refund \$120.00 to Deposit Account #150030.** Copies of the appropriate paperwork are attached. If you have questions, please do not hesitate to contact me. My phone number is 703-412-6296.

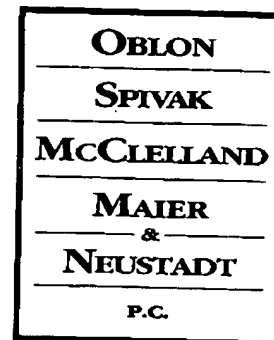
Sincerely,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Debra J. Noel

Debra J. Noel
Accounting Department

Enclosures



ATTORNEYS AT LAW

KATHLEEN A. MORSBERGER
CONTROLLER
(703) 412-6494
KMORSBERGER@OBLON.COM

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Patent and
Trademark Office**

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Deposit Account Statement

Requested Statement Month: August 2005
 Deposit Account Number: 150030
 Name: NORMAN F. OBLON
 Attention:
 Address: 1940 DUKE STREET
 City: ALEXANDRIA
 State: VA
 Zip: 22314
 Country: UNITED STATES OF AMERICA

DATE	SEQ	POSTING REF TXT	ATTORNEY DOCKET NBR	FEE CODE	AMT	BAL
08/01	2	10189248	225153US0	1201	\$200.00	\$20,516.71
08/01	2	10137405	222660US0	1806	\$180.00	\$20,336.71
08/01	3	10189248	225153US0	1202	\$50.00	\$20,286.71
08/01	113	10389988	255949US2D	1253	\$130.00	\$20,156.71
08/01	144	0157280908	255727CN/KR(FF. DEPT.)	8014	\$50.00	\$20,106.71
08/01	241	10923858	255727CN/KR(FF. DEPT)	8007	\$40.00	\$20,066.71
08/01	366	60679662	272322US/KQU	8007	\$80.00	\$19,986.71
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08/02	2	10369907	233663US-2	1806	\$180.00	\$19,626.71
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08/03	8	10944912	259216USOCONT	1201	\$200.00	\$18,881.71
08/03	210	60613716	259597US/KQU	8007	\$20.00	\$18,861.71
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Deposit Account Statement

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08/16 110	11120207	271866US20CONT	2051	\$65.00	\$17,345.71
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08/18 98	60609241	257637US/KQU	8007	\$20.00	\$17,200.71
08/18 204	60438770	232407US/KQU	8007	\$20.00	\$17,180.71
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08/19 44	10505770	257928US0XPCT	1615	\$18.00	\$16,982.71
08/22 3	10251855	228571 US0	1811	-\$100.00	\$17,082.71
08/22 5	10793858	249917US0CONT	1811	-\$100.00	\$17,182.71
08/22 5	10062189	KOBAY17001AU	1252	\$430.00	\$16,752.71
08/22 6	10505770	257928US0XPCT	1615	-\$18.00	\$16,770.71
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08/22 47	09867540	209249US2SRD	1806	-\$180.00	\$17,530.71
08/22 48	09779834	195128US20	2253	-\$510.00	\$18,040.71
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08/22 89	10923037	256759US90CONT	1051	-\$130.00	\$18,512.71
08/23 1	10496312	252755US2PCT	1202	\$300.00	\$18,212.71
08/23 3	10512870	261717US0PCT	1201	\$200.00	\$18,012.71
08/23 5	09950630	21392US2SRD	1201	\$600.00	\$17,412.71
08/23 6	10307976	231304US2	1201	\$200.00	\$17,212.71
08/24 4	10501328	25583US0PCT	1806	\$180.00	\$17,032.71
08/24 36	10923037	256759US90CONT	1201	-\$72.00	\$17,104.71
08/24 354	10722555	246061US0CONT	1253	-\$80.00	\$17,184.71
08/25 1	10603821	239499US2	1806	\$180.00	\$17,004.71
08/25 1	10440098	237218US-2	1806	\$180.00	\$16,824.71
08/25 1	10645543	241538US3X	1251	\$120.00	\$16,704.71
08/25 3	10460418	238567US20DIV	2202	\$75.00	\$16,629.71
08/25 8	10527323	267317US3PCT	1617	-\$130.00	\$16,759.71
08/25 125	0141010917	230831CA/TEP/FF	8014	\$100.00	\$16,659.71
08/26 1	10603771	239525US2	1806	\$180.00	\$16,479.71
08/26 11	10531182	270331US90PCT	1615	\$1,800.00	\$14,679.71
08/26 15	10531182	270331US90PCT	1615	\$50.00	\$14,629.71
08/26 31	PAYMENT		9203	-\$20,000.00	\$34,629.71
08/26 148	5572792	232407US/KQU	8013	\$25.00	\$34,604.71
08/26 151	6913357	240425US/KQU	8013	\$25.00	\$34,579.71
08/26 287	11052800	265773US/KQU	8007	\$100.00	\$34,479.71
08/26 291	60614974	259931US/KQU	8007	\$60.00	\$34,419.71
08/26 296	60614973	259930US/KQU	8007	\$80.00	\$34,339.71
08/26 298	60619695	260663US/KQU	8007	\$100.00	\$34,239.71
08/26 300	60615023	259932US/KQU	8007	\$140.00	\$34,099.71
08/26 301	60619694	260662US/KQU	8007	\$100.00	\$33,999.71
08/26 304	60670266	270665US/KQU	8007	\$80.00	\$33,919.71
08/29 3	10326554	230310US0X	1251	\$120.00	\$33,799.71



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,543	08/22/2003	Fumio Kinoshita	241538US3X	8110
22850	7590	07/11/2005		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
			EXAMINER BATSON, VICTOR D	
			ART UNIT 3671	PAPER NUMBER

DATE MAILED: 07/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

RECEIVED: 7-12-05
OBLON, SPIVAK, MCCLELLAND
MAIER & NEUSTADT, P.C.
DOCKETING DEPT.

Initials/Date Docketed: enx 7-12-05
Type of Resp(s): Resp to non-Resp
Due Date(s): 8-11-05

Response to Amendment

The reply filed on 4/22/05 is not fully responsive to the prior Office Action because of the following omission(s) or matter(s): Applicant did not address all of the issues set forth in the office action dated 2/22/05. Specifically, the issue regarding equation (3) found on page 3 of the office action that read as follows, "Furthermore, if equation (3) represents the frictional resistance while the trencher is in a floating state in the air, it is unclear why the liquid specific gravity around the cutter post (γ), or the cutter post volume (V) would be a part of equation (3) since it should not appear to have an effect on the frictional resistance, if the trencher is floating in the air." See 37 CFR 1.111. Since the above-mentioned reply appears to be *bona fide*, applicant is given **ONE (1) MONTH or THIRTY (30) DAYS** from the mailing date of this notice, whichever is longer, within which to supply the omission or correction in order to avoid abandonment. **EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Batson whose telephone number is (571) 272-6987. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Will can be reached on (571) 272-6998. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

OSMM&N File No. 241538US3X

Dept.: E/M

By: NFO/RTP/cfd

Serial No. 10/645,543

In the matter of the Application of: Fumio KINOSHITA, et al.

For: CONTINUOUS UNDERGROUND TRENCH EXCAVATING METHOD AND EXCAVATOR THEREFOR

Due Date: August 11, 2005

The following has been received in the U.S. Patent Office on the date stamped hereon

- Dep. Acct. Order Form
- Letter (Cover)
- Supplemental Response

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